



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,341	09/15/2003	Jesper Theil Hansen	M61.12-0529	1618
27366 7590 03/26/2008 WESTMAN CHAMPLIN (MICROSOFT CORPORATION) SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			EXAMINER KIM, PAUL	
			ART UNIT 2161	PAPER NUMBER
			MAIL DATE 03/26/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/663,341

Applicant(s)

HANSEN ET AL.

Examiner

Paul Kim

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 2161

DETAILED ACTION

1. This Office action is responsive to the following communication: Request for Continued Examination filed on 9 August 2007.
2. Claims 1 and 3-28 are pending and present for examination. Claims 1 and 19 are in independent form.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 August 2007 has been entered.

Response to Amendment

4. Claims 1, 4-6, 19-23 and 28 have been amended.
5. No claims have been added.
6. No claims have been cancelled.

Claim Rejections - 35 USC § 112

7. As per the rejections under 35 U.S.C 112, Applicant's amendment has been acknowledged. Accordingly, the rejections have been withdrawn.

Claim Rejections - 35 USC § 101

8. As per the rejections under 35 U.S.C 101, Applicant's amendment has been acknowledged. Accordingly, the rejections have been withdrawn.

Art Unit: 2161

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1, 3-8, 15-18, and 19-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dayal (USPGPUB 2004/0172385, hereinafter referred to as DAYAL), filed on 27 February 2003, and published on 2 September 2004, in view of Reinhardt (US Patent No. 6,772,164, hereinafter referred to as REINHARDT), file on 8 July 1997 and issued on 3 August 2004.

11. **As per independent claims 1 and 19**, DAYAL, in combination with REINHARDT, discloses:

A method for intermittently accessing and retrieving data contained in a business data database, comprising the steps of:

A) receiving an indication to begin accessing records in the business data database {See DAYAL, [0002]};

B) receiving an indication from a user indicating a user-specified rate of accessing data in the business data database {See DAYAL, [0041]};

C) setting a period of time to pause between accessing an entry in the business data database and accessing a next entry in the business data database based upon the user-specified rate of accessing data {See DAYAL, [0041]};

C-1) accessing entries in the business data database wherein accessing an entry in the business data database comprises:

D) reading an entry in the business data database that includes business data {See DAYAL, [0040]};

E) indexing at least a portion of the business data by storing an index entry in an index on a computer readable medium {See REINHARDT, col. 3, lines 21-30};

F) pausing for the period of time {See DAYAL, [0040]}; and

G) advancing to the next entry in the business data database {See DAYAL, [0040]}; and

H) repeating steps D-G.

Art Unit: 2161

The combination of inventions disclosed in DAYAL and REINHARDT would disclose a method wherein the method may systematically query a database at a desired rate and index the query results into an index. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by DAYAL by combining it with the invention disclosed by REINHARDT.

One of ordinary skill in the art would have been motivated to do this modification so that the user may pause the process from further accessing of entries should such be necessary to quell a system threshold overload.

12. **As per dependent claims 3 and 20**, DAYAL, in combination with REINHARDT, discloses:

The method of claim 1 wherein:

receiving the indication from the user comprises receiving an indication of a desired pause between finishing accessing the entry and advancing to the next entry in the business data database {See DAYAL, [0041]}.

13. **As per dependent claims 4 and 21**, DAYAL, in combination with REINHARDT, discloses:

The method of claim 1 further comprising the steps of:

detecting a current load on the business data database {See DAYAL, [0041]}; and

adjusting the rate of advance through the business data database based on the detected load {See DAYAL, [0041]}.

14. **As per dependent claims 5 and 22**, DAYAL, in combination with REINHARDT, discloses:

The method of claim 4 further comprising the steps of:

decreasing the rate of advance if the current load is above a first threshold level {See DAYAL, [0040]-[0041]}; and

returning to the indicated rate when the load drops below the first threshold level {See DAYAL, [0040]-[0041]}.

15. **As per dependent claims 6 and 23**, the claim does not carry patentable weight since the claim recites "increasing the rate of advance . . . if the current load is below a second threshold."

Therefore, since the "if" statement only conditionally allows for the increase in the rate of advance, the

Art Unit: 2161

claim limitation is optional and not necessary to the claimed invention. Accordingly the claim is rejected and prior art will not applied.

16. As per dependent claim 7, DAYAL, in combination with REINHARDT, discloses:

The method of claim 1 further comprising, creating a key in the index for the entry in the business data database, wherein the key corresponds to an identifier for the entry in the business data database {See REINHARDT, col. 3, lines 21-30, wherein this reads over "the data model of each database table has to take into account all data fields of all the data sets which potentially have to be stored in this database table" and "the so defined database table is capable of storing data sets which are in accordance with the predefined structure"}.

17. As per dependent claim 8, DAYAL, in combination with REINHARDT, discloses:

The method of claim 7 wherein the step of indexing copies the at least a portion of the entry in the business data database to the key in the index {See REINHARDT, col. 10, lines 44-47, wherein this reads over "[t]he field description may also contain indications as to whether a field should be indexed or not when forming an index"; and col. 11, lines 21-27, wherein this reads over "[t]he overall-index is formed from the logical list by indexing, the indexing over the fields . . . consisting over user data but also over the field contents consisting of descriptors"}.

18. As per dependent claim 15, DAYAL, in combination with REINHARDT, discloses:

The method of claim 1 further comprising the steps of:

receiving an indication from a user indicating the portions of the entry to be copied to the index; and indexing that portion of each entry to the index {See REINHARDT, col. 10, lines 44-47, wherein this reads over "[t]he field description may also contain indications as to whether a field should be indexed or not when forming an index"}.

19. As per dependent claim 16, DAYAL, in combination with REINHARDT, discloses:

The method of claim 15 further wherein indexing comprises:

replacing the entry in the index with the business data in the business data database {See REINHARDT, col. 11, lines 21-27, wherein this reads over "[t]he overall-index is formed from the logical list by indexing, the indexing over the fields . . . consisting over user data but also over the field contents consisting of descriptors"}.

20. As per dependent claim 17, REINHARDT, in combination with DAYAL, discloses:

The method of claim 1 further comprising the steps of:

receiving an indication from a user to stop accessing entries in the business data database {See DAYAL, [0028]}; and

stopping the accessing of entries in response to the received stop indication {See DAYAL, [0040]}.

The combination of inventions disclosed in DAYAL and REINHARDT would disclose a method wherein the user may prompt the method to stop accessing entries in the database by pausing the

Art Unit: 2161

claim limitation is optional and not necessary to the claimed invention. Accordingly the claim is rejected and prior art will not applied.

16. **As per dependent claim 7, DAYAL, in combination with REINHARDT, discloses:**

The method of claim 1 further comprising, creating a key in the index for the entry in the business data database, wherein the key corresponds to an identifier for the entry in the business data database {See REINHARDT, col. 3, lines 21-30, wherein this reads over "the data model of each database table has to take into account all data fields of all the data sets which potentially have to be stored in this database table" and "the so defined database table is capable of storing data sets which are in accordance with the predefined structure"}.

17. **As per dependent claim 8, DAYAL, in combination with REINHARDT, discloses:**

The method of claim 7 wherein the step of indexing copies the at least a portion of the entry in the business data database to the key in the index {See REINHARDT, col. 10, lines 44-47, wherein this reads over "[t]he field description may also contain indications as to whether a field should be indexed or not when forming an index"; and col. 11, lines 21-27, wherein this reads over "[t]he overall-index is formed from the logical list by indexing, the indexing over the fields . . . consisting over user data but also over the field contents consisting of descriptors"}.

18. **As per dependent claim 15, DAYAL, in combination with REINHARDT, discloses:**

The method of claim 1 further comprising the steps of:

receiving an indication from a user indicating the portions of the entry to be copied to the index; and indexing that portion of each entry to the index {See REINHARDT, col. 10, lines 44-47, wherein this reads over "[t]he field description may also contain indications as to whether a field should be indexed or not when forming an index"}.

19. **As per dependent claim 16, DAYAL, in combination with REINHARDT, discloses:**

The method of claim 15 further wherein indexing comprises:

replacing the entry in the index with the business data in the business data database {See REINHARDT, col. 11, lines 21-27, wherein this reads over "[t]he overall-index is formed from the logical list by indexing, the indexing over the fields . . . consisting over user data but also over the field contents consisting of descriptors"}.

20. **As per dependent claim 17, REINHARDT, in combination with DAYAL, discloses:**

The method of claim 1 further comprising the steps of:

receiving an indication from a user to stop accessing entries in the business data database {See DAYAL, [0028]}; and

stopping the accessing of entries in response to the received stop indication {See DAYAL, [0040]}.

The combination of inventions disclosed in DAYAL and REINHARDT would disclose a method wherein the user may prompt the method to stop accessing entries in the database by pausing the

Art Unit: 2161

execution. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by DAYAL by combining it with the invention disclosed by REINHARDT.

One of ordinary skill in the art would have been motivated to do this modification so that the user may pause the process from further accessing of entries should such be necessary to quell a system threshold overload.

21. **As per dependent claim 18**, REINHARDT, in combination with DAYAL, discloses:

The method of claim 1 further comprising the steps of:

receiving an indication from a user to display the progress of the method {See DAYAL, Para. 0028, wherein this reads over "method for a client to inquire into the status of an ongoing query and resuming the query from the pause record or terminating the query, as desired"}; and

displaying to the user the progress of the method through the business data database {See DAYAL, Para. 0040, wherein this reads over "the client pauses the query execution, monitors the partial report, then either terminates the query or issues a continue request"}.

The combination of inventions disclosed in DAYAL and REINHARDT would disclose a method wherein the user may request the progress of the method be displayed by inquiring into the status of the process. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by DAYAL by combining it with the invention disclosed by REINHARDT.

One of ordinary skill in the art would have been motivated to do this modification so that the user may use the progress of the method to determine whether a pause in the method is necessary.

22. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over DAYAL, in view of REINHARDT, and in further view of Brandli et al (U.S. 5,701,469, hereinafter referred to as BRANDLI), filed on 7 June 1996, and issued on 23 December 1997.

DAYAL and REINHARDT teaches the limitations of claims 1, 3-8, 15-18, and 19-23 for the reasons stated above.

Art Unit: 2161

DAYAL and REINHARDT differ from the claimed invention in that they fail to specifically teach a method wherein a timestamp of an entry is indexed (claim 9).

23. **As per dependent claim 9**, DAYAL, in combination with REINHARDT and BRANDLI, discloses:

The method of claim 8 wherein the step of indexing copies to the key a time stamp indicating a date the entry was last modified in the business data database {See BRANDLI, col. 7, lines 47-51, wherein this reads over "documents have been modified since the time indicated by the time stamp contained in the content index entries"}.

The combination of inventions disclosed in REINHARDT and BRANDLI would disclose a method wherein a timestamp indicating a date of modification is copied to the key. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by REINHARDT by combining it with the invention disclosed by BRANDLI.

One of ordinary skill in the art would have been motivated to do this modification so that the method would be able to update the entry according to the timestamps presented.

24. **Claims 10 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over DAYAL and REINHARDT, in view of Official Notice.

DAYAL and REINHARDT teaches the limitations of claims 1, 3-8, 15-18, and 19-23 for the reasons stated above.

DAYAL and REINHARDT differ from the claimed invention in that they fail to specifically teach a method wherein a program returns to the first entry in a database subsequently to having reached the last entry in the database (claim 10).

25. **As per dependent claims 10 and 24**, DAYAL, in combination with REINHARDT and Official Notice, discloses a method comprising, upon reaching a last entry in the business data database, returning to the first entry in the business data database and repeating steps B-D since it is well-known within the art to have a program loop around wherein the program is configured to intermittently access data in a database.

26. **Claims 11-13 and 25-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over DAYAL, in view of REINHARDT, in further view of Official Notice, and in further view of BRANDLI.

Art Unit: 2161

27. **As per dependent claims 11 and 25**, DAYAL, in combination with REINHARDT, Official Notice and BRANDLI, discloses:

The method of claim 10 further comprising the step of: marking in the index a time stamp indicating when the first entry in the business data database was accessed {See BRANDLI, col. 7, lines 47-51, wherein this reads over "documents have been modified since the time indicated by the time stamp contained in the content index entries"}.

28. **As per dependent claims 12 and 26**, DAYAL, in combination with REINHARDT, Official Notice and BRANDLI, discloses:

The method of claim 11 further comprising the step of: marking in the index a second time stamp indicating when the first entry in the business data database was accessed for a second time {See BRANDLI, col. 7, lines 47-51, wherein this reads over "documents have been modified since the time indicated by the time stamp contained in the content index entries"}.

29. **As per dependent claims 13 and 27**, DAYAL, in combination with REINHARDT, Official Notice and BRANDLI, discloses:

The method of claim 12 when the business data database is accessed for a third or subsequent time, further comprising the steps of: replacing the first time stamp in the indexes with the time stamp contained in the second time stamp; and marking in the second time stamp a time stamp indicating when the first entry in the business data database was accessed for a third or subsequent time {See BRANDLI, col. 7, lines 47-51, wherein this reads over "documents have been modified since the time indicated by the time stamp contained in the content index entries"}.

30. **Claims 14 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over DAYAL and REINHARDT, in view of Official Notice and BRANDLI, and in further view of Guturu et al (U.S. Patent No. 6,581,075, hereinafter referred to as GUTURU), filed on 28 December 2000, and issued on 17 June 2003.

DAYAL and REINHARDT teach the limitations of claims 1, 3-8, 15-18, and 19-23 for the reasons stated above.

DAYAL and REINHARDT differ from the claimed invention in that they fail to specifically teach a method wherein timestamps are compared and steps performed according to the results of the comparison (claims 14 and 28).

31. **As per dependent claims 14 and 28**, REINHARDT, in combination with Official Notice, BRANDLI, and GUTURU, discloses:

The method of claim 12 further comprising the steps of:

Art Unit: 2161

prior to indexing the entry, comparing the time stamp of the entry with the first time stamp {See GUTURU, col. 1, lines 58-64, wherein this reads over "comparing a timestamp of the data record to a timestamp of the data update request"};

if the time stamp of the entry is earlier than the first time stamp, then performing step D;

if the time stamp of the entry is later than the first time stamp, then performing step C {See GUTURU, col. 1, lines 58-64, wherein this reads over "the data record is updated with the data update request if the time stamp of the data update request is substantially greater than the timestamp of the data record"}.

The combination of inventions disclosed in DAYAL, REINHARDT, BRANDLI, GUTURU, and Official Notice would disclose a method wherein timestamps are analyzed and compared so that if a timestamp of an entry is earlier than that of a timestamp recorded for that entry in the index, the next record is processed. Furthermore, should the timestamp be later than the recorded timestamp, the modified data is then recorded to replace the existing data in the index. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by DAYAL and REINHARDT by combining it with the invention disclosed by BRANDLI, GUTURU, and Official Notice.

One of ordinary skill in the art would have been motivated to do this modification so that the method may properly take the appropriate steps subsequent to a timestamp comparison.

Response to Arguments

32. Applicant's arguments filed 9 August 2007 have been fully considered but they are not persuasive.

a. Finality Issues

Applicant asserts the argument that Examiner has unfairly disadvantaged Applicant by rejecting claims that were previously indicated as allowable. It is noted that in the Office action dated 11 August 2006, Examiner noted that "[c]laims 3-6 and 20-23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office

Art Unit: 2161

action and to include all of the limitations of the base claim and any intervening claims." The

Examiner notes that the originally presented claim 3 recited the following:

The method of claim 2 further comprising the steps of:

receiving an indication from a user indicating a desired rate of pause between finishing accessing a first entry and advancing to the next entry in the business data database; and

setting the period of time to pause between entries based upon the indicated rate.

However, in the Amendment filed on 14 November 2006, Applicant failed to fully incorporate the limitations of claims 3 and 20 into claims 1 and 19 respectively. That is, Applicant simply incorporated portions of the claim language found in claims 3 and 20. Accordingly, Applicant has failed to include all of the limitations of the base claim and any intervening claims such that the claims may be allowable. Therefore, the Examiner notes that the subsequent Final Office action was appropriate, having given Applicant a reasonable chance to respond to the rejections of the prior Office action.

b. Claim Rejections under 35 U.S.C. 101

Applicant's arguments with respect to claim 1 and 3-28 have been considered but are moot in view of Applicant's Amendments.

c. Claim Rejections under 35 U.S.C. 112

Applicant's arguments with respect to claim 1 and 19 have been considered but are moot in view of Applicant's Amendments.

d. Claim Rejections under 35 U.S.C. 103

Applicant asserts the argument that Reinahrtdt and Dayal fails to "teach or suggest any type of speed adjustment for indexing data." See Amendment, page 10. The Examiner respectfully disagrees. It is noted that Dayal discloses a method wherein "the client pauses the query execution, monitors the partial report, then either terminates the query or issues a continue request." See Dayal, [0040]. Therefore, wherein the user can dynamically pause and continue a query, one of ordinary skill in the art would have been able to determine that said user action would read upon the recited limitation of this present limitation (i.e. "receiving an

Art Unit: 2161

indication from a user indicating a user-specified rate of accessing data in the business data database"). Furthermore, it is noted that Dayal discloses a report governor which can pause execution of the query if system resources are exceeded. See Dayal, [0039]. Wherein a user would effectively set which system resources and thresholds the report governor monitors, one of ordinary skill in the art would have been able to read said disclosure within the scope of the claims limitations of the present invention.

Accordingly, the claim rejections under 35 U.S.C. 103 are sustained.

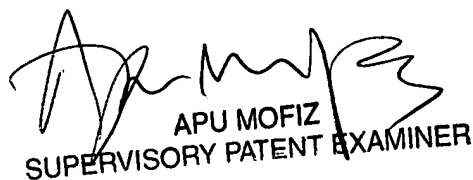
Conclusion

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Kim
Patent Examiner, Art Unit 2161
TECH Center 2100


APU MOFIZ
SUPERVISORY PATENT EXAMINER